

Work Order ID 57521

April 8, 2010 7:30:00 AM



Page 1

Item ID: D3209-041

Accept



Setup Start



Revision ID:

Item Name: Bracket Assembly

Stop



Start Date: 4/08/10 Start Qty: 4.00



Cust Item ID:

Required Date: 4/16/10 Req'd Qty: 4.00



Customer:

Reference:

10.04.08

Approvals: Process/Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3209	Rev A								

100

0.00



BAND SAW

Bandsaw

Memo

0.00

Jeaspa Bandsaw

Cut blanks: 1.500" x 1.250" x 1.950" long Bar (+0.030/-0.000)

MMO= 10/04/12

(4)

110

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

Machine D3209-1 as per Folio FA345 and Dwg D3209 Identify as D3209-1

□

Deburr and Tumble

88 10/04/13

(4)

(1)

PTO →

120

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

88 10/04/13

(4)

(1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3209-041 PAR #: NA Fault Category: Machined Parts NCR: Yes ~~No~~ DQA: NA Date: 10.04.27
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: _____ Date: _____

NCR: 57521		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10/03/14	110	One part is off center by .030" on the hole dimension. R.C. operator need the folio wrong and folio need development	CP 10.04.13 per OS/042	Scrap/replace to 110936 qty 81	AS	DTT 10/04/13	CP 10.04.13 per OS/042	S 10/04/15

NOTE: Date & initial all entries

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Item ID: D3209-041

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Setup Start



Revision ID:

Stop



Item Name: Bracket Assembly

Start Date: 4/08/10

Start Qty: 4.00



Cust Item ID:

Required Date: 4/16/10

Req'd Qty: 4.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

140

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

150

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00



Powdercoat

Memo

0.00

Powder Coating

Note: Cover the hole for D3209-1 before powder coat. ☐ START

TIME: 8:15am ☐ OVEN TEMPERATURE:

8:45am FINISH TIME: 320°F

ref 10-4-14

4

1

④

BR 10-4-15

⇒ M 10/04/16

④

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 57521

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Item ID: D3209-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Bracket Assembly

Start Date: 4/08/10 Start Qty: 4.00



Cust Item ID:

Required Date: 4/16/10 Req'd Qty: 4.00

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

161

Small Fab
Small Fab
Memo
press fit bushing as per dwg

0.00



Small Fab

Memo

0.00

Small Fab

170

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

BR

10-4-16

(4)

0

ES 10/04/18 (4)

(4)

Subulas

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 57521

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Item ID: D3209-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Bracket Assembly

Start Date: 4/08/10 Start Qty: 4.00



Cust Item ID:

Required Date: 4/16/10 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180

Identify as per dwg & Stock Location: 045

0.00



Packaging

Memo

0.00

Packaging

10/04/20 (4)

190

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/04/20 HJ

MF

10-4-20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

April 8, 2010 7:29:59 AM

Page 1

Work Order ID: 57521

Parent Item: D3209-041

Parent Item Name: Bracket Assembly

Comments: IPP A 04.06.09 New issue KJ/RF

Start Date: 4/08/10

Required Date: 4/16/10

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D3209-3		Manufactured	No			100	Each	55.0000	4.0000			
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Bushing

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST045

55

35633

14

40930

41

M6061T6B1.500X01.25
0

Purchased No

170 f

46.8000 0.7368



6061-T6 Bar 1.50 x 1.25

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

MAT10

46.8

107461

12

110936

34.8

8510/04/18

8

0825

MU= (4 piece)
10/04/10

MAT NOT out

+ 1 part scrap 8.8 10/04/13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Lean principle

To be able to produce exactly:

- **what is required**
- **when it is required**
- **the quantity required**

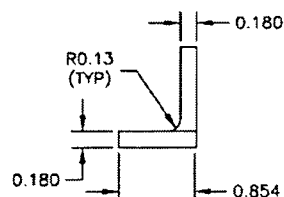
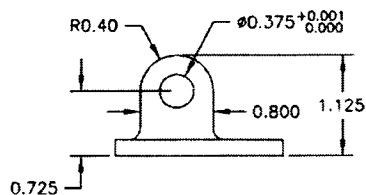
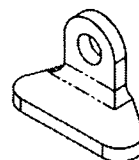
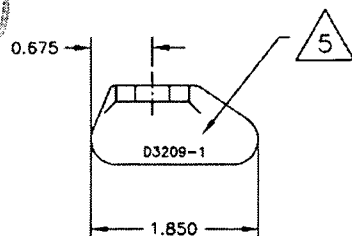
by the next step in the process.

Once a job started, it should ideally never stop



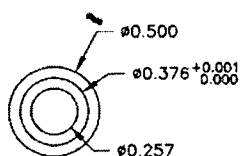
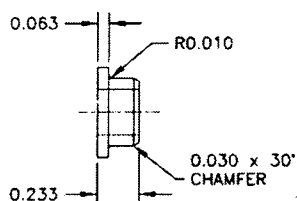
DESIGN 13	DRAWN BY 7F	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3209	REV. A SHEET 1 OF 1
DATE 04.01.27		TITLE BRACKET	SCALE 1:2
A	04.01.27	NEW ISSUE	

RELEASED

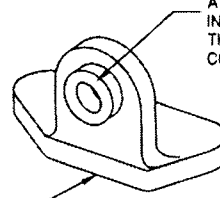


2

D3209-1 BRACKET



D3209-3 BUSHING
PRESS FIT, HEAD
AT THIS FACE
INSTALL AFTER
THE CONVERSION
COAT



D3209-1

4

D3209-041 ASSEMBLY

3

**D3209-3 BUSHING
SCALE 1:2**

D3209-1 BRACKET; D3209-3 BUSHING

- 1) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 2) MATERIAL: 6061-T6 (QQ-A-200/8 OR QQ-A-250/11 OR QQ-A-225/8)
ALUMINUM BAR (M6061T6B)
- 3) MATERIAL: AISI 303 SS (M303R)
- 4) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GREY SANTEX (REF. 4.3.5.6) PER DART QSI 005 4.3
- 5) ENGRAVE DART P/N AS SHOWN
- 6) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 7) ALL DIMENSIONS ARE INCHES

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Lean is...

- Promote customer-orientation rather than resource-orientation (produce for sales not for stock).
- A highly evolved method of managing an organization to improve the productivity, efficiency and quality of its products or services.
- Transforms how the company operates and how employees think about their work. Don't work harder but smarter by transferring your energy from the NVA to the VA activities.
- Has no end (there is no "done").